

What is claimed is:

1. A device for preventing burn-in of a display screen of an image display device, the device comprising:

a blurring device for applying a blurring process to an input image signal to obtain a blurred image signal; and

a contrast inversion device for inverting contrast of a luminance level of the blurred image signal to generate a burn-in prevention image signal.

2. The device according to claim 1, wherein pixel data of the input image signal is grouped into a plurality of pixel blocks, each pixel block includes N rows × M columns of pixels, and the blurring device is a quantizer that quantizes the pixel data of the input image signal for each pixel block.

3. The device according to claim 2, further comprising a device for varying a size of the pixel block for each field of the input image signal.

4. The device according to claim 1, further comprising a device for applying a position variation process to the burn-in prevention image signal to shift, with an elapse of time, a display position on the display screen of a display object that is displayed on the basis of the input image signal.

5. The device according to claim 1, wherein pixel data of the input image signal is grouped into a plurality of pixel blocks, each pixel block includes N rows × M columns of pixels, and the blurring device is a mosaicking circuit that mosaicks the pixel data of the input image signal for each pixel block.

6. The device according to claim 5, further comprising

a device for varying a size of the pixel block for each field of the input image signal.

7. The device according to claim 5, further comprising a device for applying a position variation process to the burn-in prevention image signal to shift, with an elapse of time, a display position on the display screen of a display object that is displayed on the basis of the input image signal.

8. A method of preventing burn-in of a display screen of an image display device, the method comprising the steps of:

A) subjecting an input image signal to blurring to obtain a blurred image signal; and

B) subjecting the blurred image signal to contrast inversion to invert contrast of a luminance level of the blurred image signal to generate a burn-in prevention image signal.

9. The method according to claim 8, wherein pixel data of the input image signal is grouped into a plurality of pixel blocks, each pixel block includes N rows \times M columns of pixels, and the step A is a quantization step that quantizes the pixel data of the input image signal for each pixel block.

10. The method according to claim 9, further comprising the step of varying a size of the pixel block for each field of the input image signal.

11. The method according to claim 8, further comprising the step of applying a position variation process to the burn-in prevention image signal to shift, with an elapse of time, a display position on the display screen of a display object that is displayed on the basis of the input image signal.

12. The method according to claim 8, wherein pixel data of the input image signal is grouped into a plurality of pixel blocks, each pixel block includes N rows × M columns of pixels, and the step A is a mosaicking step that mosaicks the pixel data of the input image signal for each pixel block.

13. The method according to claim 12, further comprising the step of varying a size of the pixel block for each field of the input image signal.

14. The method according to claim 12, further comprising the step of applying a position variation process to the burn-in prevention image signal to shift, with an elapse of time, a display position on the display screen of a display object that is displayed on the basis of the input image signal.

15. A display apparatus comprising:

a display device having a display screen;
a contour modification circuit for blurring an input image to obtain a blurred image when the input image is a still image;

a contrast inversion circuit for inverting contrast of a luminance level of the blurred image to obtain a contrast inverted image; and

a driver for displaying the contrast inverted image on the display screen when the input image is a still image.

16. The display apparatus according to claim 15, wherein the contour modification circuit is a quantizer.

17. The display apparatus according to claim 15, wherein the contour modification circuit is a mosaicker.

18. The display apparatus according to claim 15, wherein pixels of the input image are grouped into a plurality of pixel blocks, and the contour modification circuit blurs the pixels of the input image for each pixel block.

19. The display apparatus according to claim 18, further comprising a controller for varying a size of the pixel block for each field of the input image.

20. The display apparatus according to claim 15, further comprising a second controller for shifting, with an elapse of time, a display position of the burn-in prevention image on the display screen.